Tra



Patent

Case No.: 58460US002

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor:

VERNSTROM, GEORGE D.

Application No.:

10/674594

Group Art Unit:

1754

Filed:

September 29, 2003

Examiner:

Thomas H. Parsons

Title:

FUEL CELL CATHODE CATALYST

## INFORMATION DISCLOSURE STATEMENT

Mail Stop: Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 CERTIFICATE OF MAILING OR TRANSMISSION |37 CFR § 1.8(a)|

I hereby certify that this correspondence is being:

- deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.
- ☐ transmitted by facsimile on the date shown below to the United States Patent and Trademark Office at (703) 872-9306.

May 20, 2005

Signer by: Phyllis J. Boettcher

Dear Sir:

Pursuant to 37 CFR §§ 1.56, 1.97, and 1.98, enclosed is a completed Form PTO-1449, citing references submitted for consideration by the Examiner. It is respectfully requested that the Examiner initial and return the enclosed Form PTO-1449 to indicate that each reference has been considered.

Copies of any cited foreign patents, foreign publications, non-patent literature documents, and any pending U.S. applications filed before June 30, 2003, are enclosed. Copies of any pending U.S. applications filed after June 30, 2003 that can be accessed on the USPTO's IFW system are not enclosed as per USPTO Waiver dated September 21, 2004. Copies of any U.S. patents and published U.S. patent applications are not enclosed.

Under 37 CFR § 1.97(e)(1), I hereby certify that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three (3) months prior to the filing of this Information Disclosure Statement.

A copy of the Search Report from a foreign counterpart application is enclosed.

It is believed that no fee is due; however, in the event a fee is required, please charge the fee to Deposit Account No. 13-3723.

Respectfully submitted,

Date

Philip Y. Dahl, Reg. No.: 36,115

Telephone No.: (651) 737-4029

Office of Intellectual Property Counsel 3M Innovative Properties Company

Facsimile No.: 651-736-3833

## Substitute for form 1449A/PTO (modified) INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) (Use as many sheets as necessary) Page 1 of 3

orney Case Number

58460US002

Page 1 of 2

U.S. Patent Documents						
Exam.	Cite No.	Document Number	Publication Date or	Name of Patentee	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
Init.*		Doc. Number-(Kind Code if Known)	Issue Date MM-DD-YYYY	or Applicant of Cited Document		
	A1	US- 4,316,944	02/23/1982	Landsman et al.		
	A2	US- 6,300,000 B1	10/09/2001	Cavalca et al.		
	A3	US- 6,482,763 B2	11/19/2002	Haugen et al.		
	A4	US- 2002/146614 A1	10/10/2002	Norskov et al.		
	A5	US-				

	Foreign Patent Documents							
Exam.	Cite No.	Foreign Patent Document		Publication Date	Name of Patentee or	Pages, Columns, Lines,	Translation	
Init.*		Ctry. Code	Number-Kind Code (If known)	MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	(Check if yes)	
	B1	EP	0 827 225 A2	03/04/1998	N. E. Chemcat Corporation			
	B2	wo	03/073541 A1	09/04/2003	Symyx Technologies, Inc.			
	В3							

	OTHER DOCUMENTS				
Exam. Init.*	The I would be all a states (in ora 117/12 2211 21/0), tale of the article (which appropriate), tale of the fleth (book, madazine)				
	C1	Sanjeev Mukerjee and Supramaniam Srinivasan; "Enhanced Electrocatalysis of Oxygen Reduction on Platinum Alloys in Proton Exchange Membrane Fuel Cells", <u>Journal of the Electroanalytical Chemistry</u> , Lausanne, CH, Vol. 357, 1993, pp. 201 – 224.			
	C2	U. A. Paulus, A. Wokaun, G. g. Scherer, T. J. Schmidt, V. Stamenkovic, N. M. Markovic, and P. N. Ross; "Oxygen Reduction on High Surface Area Pt-based Alloy Catalysts in Comparison to Well Defined Smooth Bulk Alloy Electrodes", <u>Electrochimica Acta</u> , Elsevier Science Publishers, Barking, GB, Vol. 47, No. 22 – 23, August 30, 2002, pp. 3787 – 3798.			
	C3	A. K. Shukla, M. Neergat, Parthasarathi Bera, V. Jayaram, and M. S. Hegde; "An XPS Study on Binary and Ternary Alloys of Transition Metals With Platinized Carbon and Its Bearing Upon Oxygen Electroreduction in Direct Methanol Fuel Cells", <u>Journal of Electroanalytical Chemistry</u> , Vol. 504, No. 1, 2001, pp. 111 – 119.			
	C4	Takako Toda, Hiroshi Igarashi, Hiroyuki Uchida, and Masahiro Watanabe; "Enhancement of the Electroreduction of Oxygen on Pt Alloys With Fe, Ni, and Co", Journal of the Electrochemical Society, Vol. 146, No. 10, October 1999, pp. 3750 – 3756.			

*Examiner:	Date Considered:
EVAMINED: Initial if reference associated at a trait	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute for form 1449A/PTO (modified)

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Page 2 of 2

Application Number	10/674594
Filing Date	September 29, 2003
First Named Inventor	Vernstrom, George D.
Art Unit	1754
Examiner Name	Thomas H. Parsons
Attorney Case Number	58460US002

		OTHER DOCUMENTS				
Exam. Init.*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published				
	C5	A. Lima, C. Coutanceau, J. M. Leger, and C. Lamy; "Investigation of Ternary Catalysts for Methanol Electrooxidation", <u>Journal of Applied Electrochemistry</u> , Chapman and Hall. London, GB, Vol. 31, 2001, pp. 379 – 386.				
	C6	Peter Strasser, Qun Fan, Martin Devenney, and W. Henry Weinberg; "High Throughput Experimental and Theoretical Predictive Screening of Materials – A Comparative Study of Search Strategies for New Fuel Cell Anode Catalysts", <u>Journal of Physical Chemistry B</u> , Vol. 107, No. 40, September 17, 2003, pp. 11013 – 11021.				
	C7					
	C8					

*	Ex	_	_	:		_	
	ᄄ	d	ш	m	е	r	1

**Date Considered:**